

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	1819853
<b>Application Number:</b>	10619796
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	7886
<b>Title of Invention:</b>	Sparse and efficient block factorization for interaction data
<b>First Named Inventor/Applicant Name:</b>	Francis X. Canning
<b>Customer Number:</b>	20995
<b>Filer:</b>	Lee W. Henderson/Glen Martell
<b>Filer Authorized By:</b>	Lee W. Henderson
<b>Attorney Docket Number:</b>	CANNING.001CP2
<b>Receipt Date:</b>	29-MAY-2007
<b>Filing Date:</b>	15-JUL-2003
<b>Time Stamp:</b>	22:26:00
<b>Application Type:</b>	Utility

### Payment information:

Submitted with Payment	yes
Payment was successfully received in RAM	\$ 180
RAM confirmation Number	11986
Deposit Account	

### File Listing:

Document Number	Document Description	File Name	File Size(Bytes)	Multi Part /.zip	Pages (if appl.)
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1	Miscellaneous Incoming Letter	Transmittal_CANNING.pdf	59062	no	2
<b>Warnings:</b>					
<b>Information:</b>					
2		Amendment_CANNING.pdf	614663	yes	14
	<b>Multipart Description/PDF files in .zip description</b>				
	<b>Document Description</b>		<b>Start</b>	<b>End</b>	
	Amendment After Final		1	1	
	Claims		2	6	
	Applicant Arguments/Remarks Made in an Amendment		7	14	
<b>Warnings:</b>					
<b>Information:</b>					
3	Information Disclosure Statement (IDS) Filed	IDS_CANNING.pdf	175797	no	3
<b>Warnings:</b>					
<b>Information:</b>					
This is not an USPTO supplied IDS fillable form					
4	NPL Documents	NPL1_CANNING.pdf	181128	no	8
<b>Warnings:</b>					
<b>Information:</b>					
5	NPL Documents	NPL2_CANNING.pdf	411345	no	8
<b>Warnings:</b>					
<b>Information:</b>					
6	NPL Documents	NPL3_CANNING.pdf	5475158	no	20
<b>Warnings:</b>					
<b>Information:</b>					
7	NPL Documents	NPL4_CANNING.pdf	470569	no	11
<b>Warnings:</b>					
<b>Information:</b>					

8	NPL Documents	NPL5_CANNING.pdf	114824	no	4
<b>Warnings:</b>					
<b>Information:</b>					
9	NPL Documents	NPL6_CANNING.pdf	147125	no	4
<b>Warnings:</b>					
<b>Information:</b>					
10	NPL Documents	NPL7_CANNING.pdf	1310037	no	18
<b>Warnings:</b>					
<b>Information:</b>					
11	NPL Documents	NPL8_CANNING.pdf	235332	no	4
<b>Warnings:</b>					
<b>Information:</b>					
12	NPL Documents	NPL9_CANNING.pdf	8321643	no	21
<b>Warnings:</b>					
<b>Information:</b>					
13	NPL Documents	NPL10_CANNING.pdf	120188	no	4
<b>Warnings:</b>					
<b>Information:</b>					
14	NPL Documents	NPL11_CANNING.pdf	6281590	no	19
<b>Warnings:</b>					
<b>Information:</b>					
15	NPL Documents	NPL12_CANNING.pdf	831103	no	20
<b>Warnings:</b>					
<b>Information:</b>					
16	NPL Documents	NPL13_CANNING.pdf	3829105	no	15
<b>Warnings:</b>					
<b>Information:</b>					

17	NPL Documents	NPL14_CANNING.pdf	233593	no	7
<b>Warnings:</b>					
<b>Information:</b>					
18	NPL Documents	NPL15_CANNING.pdf	72930	no	2
<b>Warnings:</b>					
<b>Information:</b>					
19	NPL Documents	NPL16_CANNING.pdf	90734	no	2
<b>Warnings:</b>					
<b>Information:</b>					
20	NPL Documents	NPL17_CANNING.pdf	97777	no	3
<b>Warnings:</b>					
<b>Information:</b>					
21	NPL Documents	NPL18_CANNING.pdf	1108479	no	21
<b>Warnings:</b>					
<b>Information:</b>					
22	NPL Documents	NPL19_CANNING.pdf	2785699	no	28
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23	NPL Documents	NPL20_CANNING.pdf	9787374	no	108
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24	NPL Documents	NPL21_CANNING.pdf	2760393	no	52
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25	NPL Documents	NPL22_CANNING.pdf	3804863	no	44
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<b>Information:</b>					

26	NPL Documents	NPL23_CANNING.pdf	2263861	no	64
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27	NPL Documents	NPL24_CANNING.pdf	2911844	no	70
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<b>Information:</b>					
28	NPL Documents	NPL25_CANNING.pdf	706850	no	14
<b>Warnings:</b>					
<b>Information:</b>					
29	NPL Documents	NPL26_CANNING.pdf	707018	no	14
<b>Warnings:</b>					
<b>Information:</b>					
30	NPL Documents	NPL27_CANNING.pdf	6377672	no	23
<b>Warnings:</b>					
<b>Information:</b>					
31	Fee Worksheet (PTO-06)	fee-info.pdf	8185	no	2
<b>Warnings:</b>					
<b>Information:</b>					
<b>Total Files Size (in bytes):</b>			62295941		

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**New Applications Under 35 U.S.C. 111**

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

**National Stage of an International Application under 35 U.S.C. 371**

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

**New International Application Filed with the USPTO as a Receiving Office**

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.